



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,743	10/26/2001	Balakrishnan Shankar	SJI-026US	9121
7590	12/17/2003		EXAMINER	OROPEZA, FRANCES P
Derrick Reed Pacesetter Inc 15900 Valley View Court Sylmar, CA 91392-9221			ART UNIT	PAPER NUMBER
			3762	
DATE MAILED: 12/17/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/039,743	SHANKAR ET AL.
Examiner	Art Unit	
Frances P. Oropeza	3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10/17/03 (Election).  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-64 is/are pending in the application.  
 4a) Of the above claim(s) 27-64 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-26 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 26 October 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
 a) The translation of the foreign language provisional application has been received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

1) Notice of References Cited (PTO-892)                    4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    5) Notice of Informal Patent Application (PTO-152)  
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 36.                    6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1, 3, 4, 6, 10, 11, 13, 14, 16, 17, 19, 20 and 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Mass et al. (US 2002/0095195). Mass et al. disclose an implanted medical device with a first chamber (101a) and a second chamber (101b) housing the cardiac therapy circuitry (TC1) and the communication circuitry (RFC1) respectively (figure 1; paragraph 0013).

3. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Haubrich (US 6379300). Haubrich disclose and implanted device (10) with an enclosure (12) and header, antenna (20a), a diplexer (26, 30, 32, 34), an RF transceiver (24) and pacing/ sensing circuitry (28) (figure 2; col. 2 @ 47 – col. 3 @ 23; col. 3 @ 46 – col. 4 @ 24). US 5697958 to Paul et al. is incorporated by reference (col. 1 @ 22-31) to teach the antenna in the header (abstract). US 5861019 to Sun et al. is incorporated by reference (col. 1 @ 22-31) to teach the antenna integrated into the casing (abstract).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint Inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. The Applicant is advised of the obligation under 37 CFR 1.56 to point out the Inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 3, 10, 11, 13-17; 19, 20, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haubrich (US 6379300) in view of Mass et al. (US 2002/0095195). As discussed in paragraph 3 of this action, Haubrich discloses the claimed invention except for the device housing having a first chamber and a second chamber (claims 3, 8, 10, 19).

Mass et al. teach signal optimization using a first chamber and a second chamber in the implantable device housing for the purpose of isolating the communication circuitry from the cardiac therapy circuitry. It would have been obvious to one having ordinary skill in the art at the time of the invention to have used using a first chamber and

a second chamber in the implantable device housing in the Haubrich system in order to shield the sensitive therapy circuitry from the very noisy RF circuitry (figure 1; paragraph 0013).

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haubrich (US 6379300) in view of Mass et al. (US 2002/0095195) and further in view of Griffith (US 6073050).

As discussed in paragraph 3 of this action, Haubrich discloses the claimed invention except for a first chamber and a second chamber in the device housing (claim 8).

Mass et al. teach signal optimization using a first chamber and a second chamber in the implantable device housing for the purpose of isolating the communication circuitry from the cardiac therapy circuitry. It would have been obvious to one having ordinary skill in the art at the time of the invention to have used using a first chamber and a second chamber in the implantable device housing in the Haubrich system in order to shield the sensitive therapy circuitry from the very noisy RF circuitry (figure 1; paragraph 0013).

As discussed in the previous paragraph of this action, modified Haubrich discloses the claimed invention except for the diplexer being located in the second chamber.

Griffith teaches diplexer placement using a diplexer (52) located internally to the device housing (52) for the purpose of separating signal components. Absent any teaching of criticality or unexpected results, merely changing the location of diplexer

from the header and the internal chamber of the housing as taught by Haubrich to the internal chamber of the housing as taught by Griffith would be an obvious design choice (figure 3: col. 8 @ 9-21; col. 9 @ 46-56).

7. Claims 12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haubrich (US 6379300) in view of Mass et al. (US 2002/0095195) and further in view of Thompson et al. (US 6567703). As discussed in paragraphs 3 and 5 of this action, modified Haubrich discloses the claimed invention except for the second chamber being encompassed within the first chamber.

Thompson et al. teach device compartmentalization using a well in a substrate and a capacitor body cover over the well creating a second chamber located in a first chamber. The second chamber is used to isolate the high frequency signals/ excessive noise level associated with the communication circuitry from the remaining device circuitry/ the cardiac therapy circuitry located on the substrate. It would have been obvious to one having ordinary skill in the art at the time of the invention to have used a second chamber located in a first chamber in the modified Haubrich system in order incorporate a proven housing chamber configuration that enables reduction in the size and volume of the communication circuitry and improves the performance of the device (abstract; figure 10; col. 11 @ 37-64).

8. Claims 9, 18, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haubrich (US 6379300) in view of Bardy (US 6312378). As discussed in

paragraph 3 of this action, Haubrich discloses the claimed invention except for the implanted device being linked to a computing network.

Bardy teaches data management using a computing system (14, 15, 16, 17) connected to an implantable device (12) for the purpose of automatically collecting and analyzing patient information. It would have been obvious to one having ordinary skill in the art at the time of the invention to have used a computing system connected to an implantable device in the Haubrich system in order to enable remote patient care so trends in the patient's condition can be recognized and a determination made regarding the need for intervention (figure 1; col. 1 @ 8-12; col. 2 @ 41-49).

***Other Prior Art Cited***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5814091 to Dahlberg et al. teaches an implantable device housing with a chamber in a chamber.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Fran Oropeza, telephone number is (703) 605-4355. The Examiner can normally be reached on Monday – Thursday from 6 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Angela D. Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communication and for After Final communications.

Art Unit: 3762

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist at telephone number (703) 308-0858.

Frances P. Oropeza  
Patent Examiner  
Art Unit 3762

PD  
124/03

*Angela D. Sykes*

ANGELA D. SYKES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700